

CLAIMS

1. A method for preventing or ameliorating chemotherapeutic agent-induced mucosal injury, comprising administering to a patient in need thereof an effective amount of a thiol-based compound or composition prior to, concurrently with, or following the administration of a chemotherapeutic agent or chemotherapeutic agents.
2. The method according to claim 1 wherein the thiol-based compound is administered orally.
3. The method according to claim 1 wherein the thiol-based compound is administered intravenously.
4. The method according to claim 1 wherein the thiol-based compound is administered intra-arterially.
5. The method according to claim 1 wherein the thiol-based compound is administered prior to the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.
6. The method according to claim 1 wherein the thiol-based compound is administered concurrently with the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.
7. The method according to claim 1 wherein the thiol-based compound is administered following the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.

8. The method according to claim 7 wherein the thiol-based compound is administered at least or about 60 minutes prior to the beginning of the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.

9. The method according to claim 7 wherein the thiol-based compound is administered at least or about 30 minutes prior to the beginning of the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.

10. The method according to claim 7 wherein the thiol-based compound is administered at least or about 15 minutes prior to the beginning of the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.

11. The method according to claim 1 wherein the thiol-based compound is selected from the group consisting of sodium thiosulfate, N-acetylcysteine, glutathione ethyl ester, glutathione, D-methionine, cysteamine, cystamine, aminopropylmethylisothiurea, and combinations thereof.

12. The method according to claim 1 wherein the thiol-based compound is sodium thiosulfate.

13. The method according to claim 1 wherein the thiol-based compound is N-acetylcysteine.

14. The method according to claim 1 wherein the thiol-based composition comprises sodium thiosulfate and N-acetylcysteine.

15. The method according to claim 1 wherein the chemotherapeutic agent is an alkylating agent.

16. The method according to claim 15 wherein the alkylating agent is a platinum-containing alkylating agent.

17. The method according to claim 16 wherein the platinum-containing alkylating agent is selected from the group consisting of cisplatin, carboplatin, and oxyplatin.

18. The method according to claim 1 wherein the chemotherapeutic agent is carboplatin or BR96-dox.

19. The method according to claim 1 wherein the patient in need thereof is a human.

20. The method according to claim 19 wherein the thiol-based compound is N-acetylcysteine.

21. The method according to claim 24 wherein the chemotherapeutic agent is carboplatin.

22. The method according to claim 20 wherein N-acetylcysteine is administered at a dosage 150-1,400 mg/kg.

23. The method according to claim 22 wherein N-acetylcysteine is administered intravenously.

24. The method according to claim 23 wherein N-acetylcysteine is administered about 15-30 minutes prior to the beginning of the administration of the chemotherapeutic agent or at least one of the chemotherapeutic agents.